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EXAMINER	
SAMUEL, DEWANDA A	
ART UNIT	PAPER NUMBER
2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/688,787	FELLMAN ET AL.	
	Examiner	Art Unit	
	DeWanda Samuel	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 October 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 June 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to **claims 1-22** have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. **Claims 1-8** are rejected under 35 U SC 103(a) as being unpatentable over Dobson (US Patent 6,507,585) in view of Hamada et al (US Patent 4,949,336) and Haddock et al. (US Patent 5,936,962).

With regard to claim 1, Dobson discloses having system with a device adapter to transmit data from a device via a network using a carrier-sense multiple access/collision detection (CSMA/CD) protocol according to a time frame (column), Dobson discloses having a LAN adapter device ("device adapter") that are internal or external to a DMT (discrete Multi-Tone) LAN devices such as computers, computer peripherals such as printers, and modems, copiers, fax machines and personal digital assistants connected to DMT LAN (Discrete Multi-Tone Local Area Network, column 4 line 48-62). It is obvious that the data that being transferred from the LAN adapter will either real-time or non real-time data. However, Dobson does not explicitly disclose having a using a carrier-sense multiple access/collision detection (CSMA/CD) protocol. Haddock et al. discloses having a CSMA/CD based LAN (column 3 line 65-67).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a LAN adapter device ("device adapter") as taught by Dobson utilizing a CSMA/CD based LAN as taught by Haddock et al. providing a reliable access method by which nodes can connected to a shared medium.

Dobson does not explicitly discloses the time frame is substantially synchronized in the device adapter and at least one other device adapter in communication with the network, the time frame including a plurality of assigned time phases , assigned to respective device adapters and a free access phase, the time frame repeating periodically. Hamada et al. discloses having a system of a synchronous time division

multiplexing system (STDM) with a transmission apparatus or stations 11-16 in fig. 2 utilizing a multi-slot access method (column 2 line 60-67 and column 4 line 64-67)... the transmission apparatus and stations 11-16 includes a network controller ("device adapter", 103) that have the function of generation of the frame for transmission composed of plural time slots (column 5 line 17-20)... the transmission frame constituted by a plurality of time slots 8 the slots may be selected arbitrarily (column 2 line 65-67 and column 3 line 1-2). Hamada et al. further discloses that the time slot areas are indicated as "free or idle" ("free access phase") or "busy" ("assigned time phases"). In addition, Hamada et al. discloses that the system of a synchronous time division multiplexing system (STDM) enables the transmission of both periodical information and burst-type information in a mixed manner (column 2 line 1-67 and fig. 1). It is inferred that the transmission frames 4 with time slots will and without time slots will be transmitted in a periodic manner. It is inferred the network controller ("device adapter") are assigned the time slots ("time phase") and its known in the art the network controller ("device adapter") controls the transmitting and receiving of data.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a LAN adapter device as taught by Dobson in a system multi-slot access method using a synchronous time division multiplexing technique as taught by Hamada et al. to provide a synchronization technique that will avoid collision during transmission.

However, Dobson is silent about the device adapter is configured to transmit data

during at least one of a time phase assigned to the device adapter and the free access phase, the device adapter further configured to refrain from transmitting data during a time phase assigned to the at least one other device adapter. Hamada et al. discloses a transmission apparatus or stations 11-16 ("device adapter") in fig. 2 which includes a network controller (103) and utilizing a multi-slot access method...the network controller (103) have the function of generation of the frame for transmission composed of plural time slots (column 5 line 17-20)... the time slot areas are indicated as "free or idle" ("free access phase") or "busy" ("assigned time phases", column 2 line 1-19). Hamada et al. further discloses having in claim 2 a multi-slot access method that makes a determination if the time slot is "busy" ("assigned time phase") or "free" and if the time slot is not "busy" data can be transmitted (column 8 line 48-54).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a LAN adapter device as taught by Dobson with a multi-access slot method that transmit data during schedule time slots and nonscheduled time slots and make determination before transmitting if a "free" time slot is detected as taught by Hamada et al. to prevent collision within the system.

With regard to claim 2, in combination Dobson and Hamada et al. teaches the system recited in claim 1. *Wherein the network comprises a wireless network.* Dobson discloses having a internal adapter 74 shown in Figs, 2 and 3... also the physical connection 80 to infrastructure 10 may be a standard-line connection over twisted pair

cable or may be a wireless service to the gateway 100... (column 4 line 39-42).

With regard to claim 3, in combination Dobson and Hamada et al. teaches the system recited in claim 1. *Wherein the network comprises a wired network.* Dobson discloses having a internal adapter 74 shown in Figs, 2 and 3 also the physical connection 80 to infrastructure 10 may be a standard-line connection over twisted pair cable or may be a wireless service to the gateway 100... (column 4 line 39-42).

With regard to claim 4, in combination Dobson and Hamada et al. teaches the system recited in claim 3. *Wherein a physical layer of the network comprises an Ethernet physical layer.* Dobson discloses having a LAN internal.adapter 74 shown in Figs, 2 and 3 provides MAC layer 260 and physical layer 262 (column 6 line 56-57).

With regard to claim 5, in combination Dobson and Hamada et al. teaches the system recited in claim 3. Wherein the physical layer of the network is other than an Ethemet physical layer. Dobson discloses having a LAN (local area network)internal adapter 74 shown in Figs, 2 and 3 provides MAC layer 260 and physical layer 262 (column 6 line 56-57). It is known in the art that a LAN (local area network) utilize Ethernet technology.

With regard to claim 6, in combination Dobson and Hamada et al. teaches the system recited in claim 3. Wherein the physical layer comprises one or more of a home phone network (HPN) physical layer, a cable network physical layer, and a powerline communication (PLC) physical layer. Dobson discloses having a physical layer utilizing DMT (Discrete Multi-Tone) LAN medium, or physical electrical connection between devices, preferable standard residential telephone wiring-typically pairs of twisted wires ("home phone network (HPN) physical layer", column 4 line 60-62).

With regard to claim 7, in combination Dobson and Hamada et al. teaches the system recited in claim 1. Including at least one device in communication with the device adapter, the device to generate data to be transmitted by the device adapter. Dobson discloses in Fig. 3 having a LAN device with a external adapter or a internal adapter ... the DMT (Discrete Multi-Tone) LAN devices may include computers, computer peripherals such as printers and modems, copiers fax machines and personal digital assistants (column 4 line 51-54).

With regard to claim 8, in combination Dobson and Hamada et al. teaches the system recited in claim 3. *Wherein the device adapter* is to transmit *transmits data encoded on a carrier wave using a modulation scheme selected from the group consisting of quadrature amplitude modulation (QAM) and quadrature phase shift keying (QPSK).* Dobson discloses having a LAN adapter device having a frequency

domain equalizer ... the adapter devices provides a transceiver on a physical layer includes a transmitter having a DMT modulator (abstract)... the MOD modulator block 406 maps input data to complex points in a signal constellation for each channel. One of a number modulation techniques may be used, Quadrature Amplitude Modulation (QAM)... including QPSK (Quadrature Phase Shift Keying, column 11 line 45-54).

5. **Claims 9-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Haddock et al. (US Patent 5,936,962) in view of Hamada et al. (US Patent 4,949,336).

With regard to claim 9, Haddock et al. discloses having a system comprising:

a CSMA/CD network; (column 6 line 13-15).

a plurality of device; (column 7 line 48-67 and fig. 1).

a plurality of device adapters each in communication with one or more of the plurality of devices, wherein each of the plurality of device adapters is configured to transmit data from at least one of the plurality of devices over the network according to a time frame, Haddaock et al. discloses having a 10Base-T adapter ('device adapter") in a node configured transmit and receive data packets on a channel (column 8 line 1-5).

Haddock does not explicitly discloses wherein the time frame is substantially synchronized in the plurality of device adapters, the time frame including a plurality of assigned time phases each assigned to one of the device adapters, and a free access phase, the time frame repeating periodically; Hamada et al. discloses a transmission

apparatus or stations 11-16 ("device adapter") in fig. 2 which includes a network controller ("adapter", 103) and utilizing a multi-slot access method.., the network controller (103) have the function of generation of the frame for transmission composed of plural time slots (column 5 line 17-20)... the time slot areas are indicated as "free or idle" ("free access phase") or "busy" ("assigned time phases", column 2 line 1-19). Hamada et al. further discloses having in claim 2 a multi-slot access method that makes a determination if the time slot is "busy" ("assigned time phase") or "free" and if the time slot is not "busy" data can be transmitted (column 8 line 48-54). It is inferred that each network controller ("adapter") can be assigned time slots ("time phases") .

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a 10Base-T adapter ('device adapter") as taught by Haddock et al. synchronizing each with a plurality of plural time slots which comprised of free or idle" ("free access phase") or "busy" ("assigned time phases") as taught by Hamada et al. to efficiently transmit data within a assigned time slot.

and wherein each device adapter is configured to transmit data during at least one of a time phase assigned to the device adapter and the free access phase, each device adapter further configured to refrain from transmitting data during a time phase assigned to a different device adaptor of the plurality of device adapters. Haddock et al. discloses having a node comprised of 10Base-T adapter ('device adapter") within a node sensing a carrier signal that at least one node is transmitting on the

communication medium ...the node will defer until a current transmission is complete (column 6 line 31-48).

With regard to claim 10, in combination Haddock et al. and Hamada et al. teaches the system recited in claim 9. *wherein the network comprises a wireless network.*

With regard to claim 11, in combination Haddock et al. and Hamada et al. teaches the system recited in claim 9. *wherein the network comprises a wired network.* (column 7 line 35-38).

With regard to claim 12, in combination Haddock et al. and teaches the system recited in claim 11. *wherein a physical layer of the network comprises an Ethernet physical layer.* Haddock et al. discloses having 10Base-T adapter ("Ethernet physical layer", column 7 line 45-67).

With regard to claim 13, in combination Haddock et al. and Hamada et al. teaches the system recited in claim 11. *wherein the physical layer of the network is other than an Ethernet physical layer.*

With regard to claim 14, in combination Haddock et al. and teaches the system recited in claim 11. *wherein the physical layer comprises one or more of a home phone network (HPN) physical layer, a cable network physical layer, and a powerline communication (PLC) physical layer.* Haddock et al. discloses having a coaxial cable (column 7 line 45).

6. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haddock et al. (US Patent 5,936,962) and Hamada et al. (US Patent 4,949,336) as applied to claim 9 above, and further in view of Dobson (US Patent 6,507,585).

With regard to claim 15, in combination Haddock et al. and Hamada et al. teaches the system recited in claim 9. *wherein the device adapter is to transmit data encoded on a carrier wave using a modulation scheme selected from the group consisting of quadrature amplitude modulation (QAM) and quadrature phase shift keying (QF SK).* Haddaock et al. discloses having a 10Base-T adapter ("device adapter", column 8 line 2-5). Dobson discloses having a LAN adapter device having a frequency domain equalizer o.. the adapter devices provides a transceiver on a physical layer includes a transmitter having a DMT modulator (abstract)...the MOD modulator block 406 maps input data to complex points in a signal constellation for each channel. At least one of the modulation techniques may be used, Quadrature Amplitude Modulation (QAM)... including QPSK (Quadrature Phase Shift Keying, column 11 line

45-54).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a 10Base-T adapter ("device adapter with a as taught by Haddock et al. including a transceiver on a physical layer includes a transmitter having a DMT modulator (abstract) that is using at least one of the modulation techniques may be used, Quadrature Amplitude Modulation (QAM)... including QPSK (Quadrature Phase Shift Keying, column -11 line 45-54) as taught by Dobson to provide a technique that will reduce phase ambiguity between the transmitter and receiver.

7. **Claims 16-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada et al. (US Patent 4,949,336) as applied to claim 16 above, and further in view of Dobson (US Patent 6,507,585) and Haddock et al. (US Patent 5,936,962).

With regard to claim 16, Hamada et al. discloses a method of controlling communications on a network, the method comprising. Hamada et al. discloses having a multi-slot access method that control the access of data on the network (column 8 line 7-54). *maintaining a substantially synchronized time frame among a plurality of device adapters interconnected by a CSMA/CD a network, the time frame having a plurality of*

assigned time phases , each assigned to one of the device adapter and a free access phase, the time frame repeating periodically; Hamada et al. discloses having a system of a synchronous time division multiplexing system (STDM) with a transmission apparatus or stations 11-16 in fig. 2 utilizing a multi-slot access method (column 2 line 60-67 and column 4 line 64-67)...the transmission apparatus and stations 11-16 includes a network controller (103) that have the function of generation of the frame for transmission composed of plural time slots (column 5 line 17-20)...the transmission frame 4 constituted by a plurality of time slots 8 the slots may be selected arbitrarily (column 2 line 65-67 and column 3 line 1-2)...transmission frame 4 is transmitted repeatedly along the transmission path (column 3 line 11-9). Hamada et al. further discloses the time slot areas are indicated as "free or idle ("free access phase") or "busy" ("assigned time phases", column 2 line 1-19). It is inferred that the transmission apparatus or station 11 generates a schedule of time slots via network controller ("device adapter",103) located in the transmission station. It is inferred the network controller ("device adapter") are assigned the time slots ("time phase") and its known in the art the network controller ("device adapter") controls the transmitting and receiving of data. However, Hamada et al. does not explicitly disclose having a CSMA/CD a network Haddock et al. discloses having a CSMA/CD based LAN (column 3 line 65-67).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a network controller ("device adapter") as taught by Hamada et al. utilizing a CSMA/CD based LAN as taught by Haddock et al. providing

a reliable access method by which nodes can connected to a shared medium.

controlling a first device adapter to transmit data during at least one of a time phase assigned to the first device adapter and the free access phase and to refrain from transmitting data during a time phase assigned to another device adapter; Hamada et al. discloses a transmission apparatus or stations 11-16 ("device adapter") in fig. 2 which includes a network controller (103) and utilizing a multi-slot access method...the network controller (t 03) have the function of generation of the frame for transmission composed of plural time slots (column 5 line 17-20)... the time slot areas are indicated as "free or idle" ("free access phase") or "busy" ("assigned time phases", column 2 line 1-19). Hamada et al. further discloses having in claim 2 a multi-slot access method that makes a determination if the time slot is "busy" ("assigned time phase") or "free" and if the time slot is not "busy" data can be transmitted (column 8 line 48-54)i

With regard to claim 17, in combination Hamada et al., Dobson and Haddock et al. teaches the method recited in claim 16. Controlling the first device adapter to transmit the data on a wireless network. Hamada
et al. discloses having a multi-slot access method: However, Hamada et al. does not disclose controlling the first device adapter to transmit the data on a wireless network. Dobson discloses having an LAN internal adapter 74 shown in Figs, 2 and 3. Dobson

further teaches that the medium access control rules are embedded in each Ethernet interface (" LAN internal adapter 74), and allow multiple computers to access the shared Ethernet channel (column 1 line 54-61). In addition, Dobson discloses the physical Connection 80 to infrastructure 10 may be a standard land-line connection over twisted pair cable or may be a wireless service to the gateway 100 (fig 1 and column 4 line 34-42).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have multi-slot access method as taught by Hamada et al. with medium access control rules are embedded in each Ethernet interface (" LAN internal adapter 74), and allow multiple computers to access the shared Ethernet channel (column 1 line 54-61) as taught by Dobson to provide a more versatile system that is able to handle all types of data.

With regard to claim 18, in combination Hamada et al., Dobson and Haddock et al. teaches the method recited in claim 16. Controlling the first deviceadapter to transmit the data on a wireless network. Hamada et al. discloses having a transmission apparatus with a multi-slot access method (column 8 7-54)°

However, Hamada et al. does not disclose controlling Dobson discloses having an LAN internal adapter 74 shown in Figs, 2 and 3. Dobson further teaches that the medium access control rules are embedded in each Ethemet interface (" LAN internal adapter 74), and allow multiple computers to access the shared Ethernet channel (column 1 line

54-61). In addition, Dobson discloses the physical connection 80 to infrastructure 10 may be a standard land-line connection over twisted pair cable or may be a wireless service to the gateway 100 (fig 1 and column 4 line 34-42).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have multi-slot access method as taught by Hamada et al. with medium access control rules are embedded in each Ethernet interface (" LAN internal adapter 74), and allow multiple computers to access the shared Ethernet channel (column 1 line 54-61) as taught by Dobson to provide a more versatile system that is able to handle all types of data.

With regard to claim 19, in combination Hamada et al., Dobson and Haddock et al. teaches the method recited in claim 18. Wherein the wired network has a physical layer of the network comprises an Ethernet physical layer. Hamada et al. discloses having a transmission apparatus or station (" adapter device") with a multi-slot access method. However, Hamada et al. does not disclose a physical layer of the network comprises an Ethernet physical layer. Dobson discloses having an internal adapter 74 shown in Figs, 2 and 3 provides MAC layer 260 and a physical layer 262 (column 6 line 56-57). Also, Dobson discloses the DMT LAN devices is connected to the DMT LAN 20 which may include computers, computer peripherals such as printers and modems, TVs

and audio visual equipment which uses Ethernet technology.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a transmission apparatus or station (" adapter device") with a multi-slot access method as taught by Hamada with DMT LAN (Discrete Multi-Tone Local Area Network) devices is connected to the DMT LAN 20 utilizing Ethernet technology as taught by Dobson to provide a technique that will provide each device its own private connection to the LAN.

With regard to claim 20, in combination Hamada et al., Dobson and Haddock et al. teaches the method recited in claim 18. Wherein the wired network has a physical layer of the network comprising other than an Ethemet physical layer. Hamada et al. discloses having a transmission apparatus (" adapter device") with a multi-slot access method in a local area network (fig. 2). However, Hamada et al. does not disclose having a wired network has a physical layer of the network comprising other than an Ethemet physical layer. Dobson discloses having an internal adapter 74 shown in Figs, 2 and 3 provides MAC layer 260 and physical layer 262 (column 6 line 56-57).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a transmission apparatus (" adapter device") with a multi-slot access method in a local area network (fig. 2) as taught by Hamada using the MAC layer 260 as taught by Dobson to provide a way to move data packets

from one adapter to another across a shared channel.

With regard to claim 21, in combination Hamada et al., Dobson and Haddock et al. teaches the method recited in claim 20. *wherein the wired network has a physical layer comprising at least one of a home phone network (HPN) physical layer, a cable network physical layer, and a powerline communication (PLC) physical layer.* Hamada et al. discloses having a transmission apparatus (" adapter device") with a multi-slot access method in a local area network (fig. 2). However, Hamada et al. does not disclose having a wired network has a physical layer comprising at least one of a home phone network (HPN) physical layer, a cable network physical layer, and a powerline communication (PLC) physical layer. Dobson discloses having a physical layer utilizing DMT (Discrete Multi-Tone) LAN medium, or physical electrical connection between devices, preferable standard residential telephone wiring-typically pairs Of twisted wires ("home phone network (HPN) physical layer", column 4 line 60-62).
Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to having a transmission apparatus (" adapter device") with a multi-slot access method in a local area network (fig. 2) as taught by Hamada DMT (Discrete Multi-Tone) LAN medium, or physical electrical connection between devices ("home phone network (HPN) physical layer") as taught by Dobson to have a physical medium that is compatible to the technology within the LAN such as Ethernet technology.

With regard to claim 22, in combination Hamada et al., Dobson and Haddock et. al. teaches the method recited in claim 16. controlling *the first device adapter to transmit data encoded on a carrier wave using a modulation scheme selected from the group consisting of quadrature amplitude modulation (QAM) and quadrature phase shift keying (QPSK).* Hamada et al. discloses having a transmission apparatus with a multi-slot access method in a local area network (fig. 2). However, Hamada et al. does not disclose controlling the first device adapter to transmit data encoded on a carrier wave using a modulation scheme selected from the group consisting of quadrature amplitude modulation (QAM) and quadrature phase shift keying (QPSK).Dobson discloses having a LAN adapter device having a frequency domain equalizer o.. the adapter devices provides a transceiver on a physical layer includes a transmitter having a DMT modulator (abstract)...the MOD modulator block 406 maps input data to complex points in a signal constellation for each channel. At least one of the modulation techniques may be used, Quadrature Amplitude Modulation (QAM)... including QPSK (Quadrature Phase Shift Keying, column 11 line 45-54).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a transmission apparatus (" adapter device") with a multi-slot access method in a local area network (fig. 2) as taught by Hamada et al. including a transceiver on a physical layer includes a transmitter having a DMT

modulator (abstract) that is using at least one of the modulation techniques may be used, Quadrature Amplitude Modulation (QAM)... including QPSK (Quadrature Phase Shift Keying, column -11 line 45-54) as taught by Dobson to provide a technique that will reduce phase ambiguity between the transmitter and receiver.

Prior Art

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

Haddock et al. (US patent 5,999,538) discloses having a method and apparatus for arbitrating data transmission in a CSMA/CD LAN.

Bunch (US Patent 6,198,722) discloses having a flow control method for networks.

Shaffer et al. (US Patent 6,172,983) discloses having a hub dominated method and system for managing network collision.

Uekumasu (US Patent 6,038,215) discloses network system and communication device.

Grabiec et al. (US patent 6,006,271) discloses having a method and protocol for completion resolution in local area networks.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DeWanda Samuel whose telephone number is (571) 270-1213. The examiner can normally be reached on Monday- Thursday 8:30-5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Q. Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DeWanda Samuel
12/21/2007

RICKY Q. NGO
SUPERVISORY PATENT EXAMINER